P-2
W-4

BRUHATH BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB-DIVISION

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA

Estimated Cost :- 200.00 lakhs

BRUHAT BANGALORE MAHANAGARA PALIKE

Byatarayanapura Division

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA

DETAILED COST ESTIMATE

Estimate Cost : Rs.200.00 Lakhs

SL NO	PARTICULARS	UNIT	NO	MEASUREMENT			QUANTITY	RATE	AMOUNT
				LENGTH	BREADTH	DEPTH			
1	Removing and resetting of footpath slab (Approved arrival rate)								
	i] Cauveri Enclave	Sqm	2.00	151.00	0.90		271.80		
	ii] Sampige Road	Sqm	2.00	805.00	0.90		1449.00		
	iii] Thindlu Village								
	Akayamma House Road	Sqm	2.00	61.00	0.90		109.80		
	3rd Cross[Opp Akayamma House Road]	Sqm	2.00	156.00	0.90		280.80		
	Kunte Road	Sqm	2.00	120.00	0.90		216.00		
	iv] Indian Express Layout								
	1st Main Left Side	Sqm	2.00	94.00	0.90		169.20		
	1st Main Right Side	Sqm	2.00	138.00	0.90		248.40		
	1st Main 1st cross	Sqm	2.00	33.00	0.90		59.40		
	1st Main 2nd cross	Sqm	2.00	32.00	0.90		57.60		
	1st Main 3rd cross	Sqm	2.00	31.00	0.90		55.80		
	7th Cross[Prakruthi Home]	Sqm	2.00	100.00	0.90		180.00		
	2nd Main Left Side	Sqm	2.00	87.00	0.90		156.60		
	2nd Main Right Side	Sqm	2.00	43.00	0.90		77.40		
	v]Dhanalakshmi Layout								
	2nd Cross	Sqm	2.00	156.00	0.90		280.80		
	3rd Cross	Sqm	2.00	165.00	0.90		297.00		
					Total		3909.60		
	Consider 75%				**Sub Total**		**2932.20**		
	Deduct 25% Missing Slabs						**733.05**		
					Sub Total A		**2199.15**		
	Culverts	Sqm	15.00	6	1.5		135		
					Sub Total		**135**		
	Deduct 20% Missing Slabs						27		
					Sub Total B		**108**		
					Total A+B		**2307.15**	**235.00**	**542180.25**
	Data Rate	**235.00**							
2	Removing and resetting of kerb stone (Approved arrival rate).								
	Sampige Road	Mtr	2.00	805.00			1610.00		
					Sub Total		**1610.00**		
	Deduct 20% Missing Kerbs						322		
					Total		**1288.00**	**118.00**	**151984.00**
	Data Rate	**118.00**							
3	Dismantling of cement concrete pavement, Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately [PWD SR 2023-24/ Volume-3/ Chapter-2/P.NO-12/ Item no:-2.19/Ref. to MoRT&H : IRC 202]								
	Kunte Road Thindlu	Cum	1.00	120.00	4.50	0.20	108.00		
	Kunte Road A Cross Thindlu	Cum	1.00	30.00	4.00	0.20	24.00		
	Culverts	Cum	15.00	6.00	1.80	0.20	32.40		
					Total		**164.40**	**619.30**	**101812.92**
	Basic Rate	**563.00**							
	Add AW 10%	56.30							
	Total	**619.30**							

4	Earth work excavation by manual means for drains, canals, waste weir, draft, approach channels, key trenches, foundation of Buildings & bridges and such simillar works in all kinds of soils, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. In all kinds of soils Depth upto 1.5 m[PWD SR 2023-24/ Volume-1/ Chapter-1/P.NO-5/ Item no:-1.4.1]								
		Drain Disilting							
	i] Cauveri Enclave	Cum	2.00	152.00	0.60	0.45	82.08		
	ii] Sampige Road	Cum	2.00	805.00	0.60	0.45	434.70		
	iii] Thindlu Village								
	Akayamma House Road	Cum	2.00	61.00	0.60	0.45	32.94		
	3rd Cross[Opp Akayamma House Road]	Cum	2.00	156.00	0.60	0.45	84.24		
	Kunte Road	Cum	2.00	120.00	0.60	0.45	64.80		
	iv] Indian Express Layout								
	1st Main Left Side	Cum	2.00	94.00	0.60	0.45	50.76		
	1st Main Right Side	Cum	2.00	138.00	0.60	0.45	74.52		
	1st Main 1st cross	Cum	2.00	33.00	0.60	0.45	17.82		
	1st Main 2nd cross	Cum	2.00	32.00	0.60	0.45	17.28		
	1st Main 3rd cross	Cum	2.00	31.00	0.60	0.45	16.74		
	7th Cross[Prakruthi Home]	Cum	2.00	100.00	0.60	0.45	54.00		
	2nd Main Left Side	Cum	2.00	87.00	0.60	0.45	46.98		
	2nd Main Right Side	Cum	2.00	43.00	0.60	0.45	23.22		
	v]Dhanalakshmi Layout								
	2nd Cross	Cum	2.00	156.00	0.60	0.45	84.24		
	3rd Cross	Cum	2.00	165.00	0.60	0.45	89.10		
	Culvert Disilting	Cum	10.00	6.00	0.90	0.50	27.00		
		Cum	5.00	8.00	0.90	0.50	18.00		
	New RCC Culverts	Cum	10.00	6.00	1.80	1.00	108.00		
					Total		**1326.42**	**266.20**	**353093.00**
	Basic Rate	**242.00**							
	Add AW 10%	24.20							
	Total	**266.20**							
5	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications[PWD SR 2023-24/ Volume-2/ Chapter-6/P.NO-17/ Item no:-6.33]								
		Flagging Course							
	i] Cauveri Enclave	Sqm	2.00	152.00		0.20	60.80		
	ii] Sampige Road	Sqm	2.00	805.00		0.20	322.00		
	iii] Thindlu Village								
	Akayamma House Road	Sqm	2.00	61.00		0.20	24.40		
	3rd Cross[Opp Akayamma House Road]	Sqm	2.00	156.00		0.20	62.40		
	Kunte Road	Sqm	2.00	120.00		0.20	48.00		
	iv] Indian Express Layout								
	1st Main Left Side	Sqm	2.00	94.00		0.20	37.60		
	1st Main Right Side	Sqm	2.00	138.00		0.20	55.20		
	1st Main 1st cross	Sqm	2.00	33.00		0.20	13.20		
	1st Main 2nd cross	Sqm	2.00	32.00		0.20	12.80		
	1st Main 3rd cross	Sqm	2.00	31.00		0.20	12.40		
	7th Cross[Prakruthi Home]	Sqm	2.00	100.00		0.20	40.00		
	2nd Main Left Side	Sqm	2.00	87.00		0.20	34.80		
	2nd Main Right Side	Sqm	2.00	43.00		0.20	17.20		
	v]Dhanalakshmi Layout								
	2nd Cross	Sqm	2.00	156.00		0.20	62.40		
	3rd Cross	Sqm	2.00	165.00		0.20	66.00		

						Total		869.20		
	Consider 75%							651.90	1354.10	882737.79
	Basic Rate	**1231.00**								
	Add AW 10%	123.10								
	Total	**1354.10**								
6	Providing ruled pointing to coursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as per specification.[PWD SR 2023-24/ Volume-2/ Chapter-21/P.NO-214/ Item no:-21.10]									
		Flagging Course								
	i] Cauveri Enclave	Sqm	1.00	152.00		0.60	91.20			
	ii] Sampige Road	Sqm	1.00	805.00		0.60	483.00			
	iii] Thindlu Village									
	Akayamma House Road	Sqm	1.00	61.00		0.60	36.60			
	3rd Cross[Opp Akayamma	Sqm	1.00	156.00		0.60	93.60			
	Kunte Road	Sqm	1.00	120.00		0.60	72.00			
	iv] Indian Express Layout									
	1st Main Left Side	Sqm	1.00	94.00		0.60	56.40			
	1st Main Right Side	Sqm	1.00	138.00		0.60	82.80			
	1st Main 1st cross	Sqm	1.00	33.00		0.60	19.80			
	1st Main 2nd cross	Sqm	1.00	32.00		0.60	19.20			
	1st Main 3rd cross	Sqm	1.00	31.00		0.60	18.60			
	7th Cross[Prakruthi Home]	Sqm	1.00	100.00		0.60	60.00			
	2nd Main Left Side	Sqm	1.00	87.00		0.60	52.20			
	2nd Main Right Side	Sqm	1.00	43.00		0.60	25.80			
	v]Dhanalakshmi Layout									
	2nd Cross	Sqm	1.00	156.00		0.60	93.60			
	3rd Cross	Sqm	1.00	165.00		0.60	99.00			
						Total		1303.80		
	Consider 75%							977.85	328.90	321614.87
	Basic Rate	**299.00**								
	Add AW 10%	29.90								
	Total	**328.90**								
7	Providing and laying in position Cement Concrete for **levelling course** for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications. **Mix 1:2:4 Using 20 mm nominal size graded crushed coarse aggregates**[PWD SR 2023-24/ Volume-1/ Chapter-2/P.NO-15/ Item no:-2.1.6]									
		Copping Concrete								
	i] Cauveri Enclave	Cum	4.00	152.00	0.20	0.10	12.16			
	ii] Sampige Road	Cum	4.00	805.00	0.20	0.10	64.40			
	iii] Thindlu Village									
	Akayamma House Road	Cum	4.00	61.00	0.20	0.10	4.88			
	3rd Cross[Opp Akayamma	Cum	4.00	156.00	0.20	0.10	12.48			
	Kunte Road	Cum	4.00	120.00	0.20	0.10	9.60			
	iv] Indian Express Layout									
	1st Main Left Side	Cum	4.00	94.00	0.20	0.10	7.52			
	1st Main Right Side	Cum	4.00	138.00	0.20	0.10	11.04			
	1st Main 1st cross	Cum	4.00	33.00	0.20	0.10	2.64			
	1st Main 2nd cross	Cum	4.00	32.00	0.20	0.10	2.56			
	1st Main 3rd cross	Cum	4.00	31.00	0.20	0.10	2.48			
	7th Cross[Prakruthi Home]	Cum	4.00	100.00	0.20	0.10	8.00			
	2nd Main Left Side	Cum	4.00	87.00	0.20	0.10	6.96			
	2nd Main Right Side	Cum	4.00	43.00	0.20	0.10	3.44			
	v]Dhanalakshmi Layout									
	2nd Cross	Cum	4.00	156.00	0.20	0.10	12.48			
	3rd Cross	Cum	4.00	165.00	0.20	0.10	13.20			
	Culvert	Cum	4.00	6.00	0.20	0.10	0.48			
		Cum	4.00	8.00	0.20	0.10	0.64			
	Culvert	Cum	10.00	6.00	0.20	0.10	1.20			
	Culvert Ramp	Cum	10.00	6.00	1.00	0.20	12.00			
	For New RCC Culvert Bed	Cum	10.00	6.00	1.80	0.10	10.80			

					Total		198.96		
	Consider 75%						149.22	6867.30	1024738.51
	Basic Rate	**6243.00**							
	Add AW 10%	624.30							
	Total	**6867.30**							
8	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications.**M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates**[PWD SR 2023-24/ Volume-1/ Chapter-2/P.NO-16/ Item no:-2.4.2]									
	For New RCC Culvert Bed								
	For Raft	Cum	10.00	6.00	1.60	0.20	19.20		
	For Side Wall	Cum	20.00	6.00	0.23	0.90	24.84		
					Total		44.04	7650.83	336942.55
	Basic Rate	**6323.00**							
	Add AW 10%	632.30							
	Sub-Total	**6955.30**							
	Centering & Shuttering 10%	695.53							
	Total	**7650.83**							
9	Steel Fabrication,Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification .c For Substructure of Bridges[PWD SR 2023-24/ Volume-1/ Chapter-2/P.NO-91/ Item no:-2.11]								
	Quantity From Item 8[90kg/cum]		1.00	44.04		90.00	3963.60		
						Tonne	3.96		
					Total		3.96	86912.10	344484.80
	Basic Rate	**79011.00**							
	Add AW 10%	7901.10							
	Sub-Total	**86912.10**							
10	Providing and laying 100mm thick pre-cast cover slabs over Road side drains / utility ducts / Rain water harvesting pit of width not exceeding 1000 mm using M20 concrete reinforced with TMT bars Fe 550 @ 6kg/m2, slabs jointed in CM 1:3 proportion and nicely finished Including providing holes in the Cover slabs wherever necessary for easy drain age of surface waterincluding of labour, materials, scaffolding, usage of machinery, curing, lead and lift charges etc, Complete.[PWD SR 2023-24/ Volume-2/ Chapter-2/P.NO-177/ Item no:-17.14]								
	New CC Slabs - 100mm								
	Quantity From Damaged/missing Slabs	Sqm	1.00	733.05			733.05		
					Total		733.05	1287.00	943435.35
	Basic Rate	**1170.00**							
	Add AW 10%	117.00							
	Sub-Total	**1287.00**							
11	Providing and fixing 230mm thick pre cast reinforced concrete slab as per design and drawing material cost,transportation, hire charges of machinery complete with all lead and lift conveyance charges labour charges inclusive of cost of all materials(As per data rate)								
	New CC Slabs - 230mm								
	Quantity From Damaged/missing Slabs	Sqm	1.00	27.00			27.00		
	For New RCC Culvert Bed Concrete	Sqm	10.00	6.00	1.80		108.00		
					Total		135.00	5037.00	679995.00
	Data Rate	**5037.00**							

12	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cuttingincluding formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete asdirected by the Engineer in Charge of the work (excluding GST and Area Leading Charges) (Data Rate).								
	New Kerb Stones								
	Quantity From Damaged/missing kerbs		1.00	322.00			322.00		
					241.5/.45		715.56		
					Total		**715.56**	**507.00**	**362786.67**
	Data Rate	**507.00**							
13	Painting Two Coats on New Concrete Surfaces, Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces[PWD SR 2023-24/ Volume-3/ Chapter-8/P.NO-66/ Item no:-8.10]								
	Sampige Road	Sqm	2.00	805.00		0.35	563.50		
					Total		**563.50**	119.90	67563.65
	Basic Rate	**109.00**							
	Add AW 10%	10.90							
	Total	**119.90**							
	Road								
14	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work.In all kinds of soils upto 300 mm depth[PWD SR 2023-24/ Volume-1/ Chapter-1/P.NO-8/ Item no:-1.12]								
		Edge Cutting/Potholes/Road Damage							
	ii] Sampige Road	Cum	1.00	805.00	6.00	0.20	966.00		
	iii] Thindlu Village								
	Akayamma House Road	Cum	1.00	61.00	5.50	0.20	67.10		
	3rd Cross[Opp Akayamma	Cum	1.00	156.00	5.00	0.20	156.00		
	iv] Indian Express Layout								
	1st Main Left Side	Cum	1.00	94.00	4.50	0.20	84.60		
	1st Main Right Side	Cum	1.00	138.00	5.40	0.20	149.04		
	1st Main 1st cross	Cum	1.00	33.00	3.50	0.20	23.10		
	1st Main 2nd cross	Cum	1.00	31.00	4.00	0.20	24.80		
	1st Main 3rd cross	Cum	1.00	31.00	4.50	0.20	27.90		
	7th Cross[Prakruthi Home]	Cum	1.00	100.00	4.50	0.20	90.00		
	2nd Main Left Side	Cum	1.00	87.00	5.50	0.20	95.70		
	2nd Main Right Side	Cum	1.00	43.00	5.00	0.20	43.00		
	v]Dhanalakshmi Layout								
	2nd Cross	Cum	1.00	156.00	5.00	0.20	156.00		
	3rd Cross	Cum	1.00	165.00	4.50	0.20	148.50		
					Sub-Total		2031.74		
	Consider 15% Road Damage						**304.76**		
	Cauveri Enclave[New Asphalt Road]	Cum	1.00	152.00	4.80	0.20	145.92		
	Kunte Road[CC Road]	Cum	1.00	120.00	4.50	0.20	108.00		
	Kunte Road A Cross Thindlu	Cum	1.00	30.00	4.00	0.20	24.00		
					Sub-Total B		**253.92**		
					Total A+B		**558.68**	**104.50**	**58382.16**
	Basic Rate	**95.00**							
	Add AW 10%	9.50							
	Total	**104.50**							

15	Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 14:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 140 kg/ m3 , optimum moisture content to be determined during trial length construction, concrete strength not to be less than 7 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing[PWD SR 2023-24/ Volume-3/ Chapter-6/P.NO-49/ Item no:-6.1]								
	Kunte Road[CC Road]	Cum	1.00	120.00	4.50	0.15	81.00		
	Kunte Road A Cross Thindlu	Cum	1.00	30.00	4.00	0.15	18.00		
					Total		**99.00**	**5412.00**	**535788.00**
	Basic Rate	**4920.00**							
	Add AW 10%	492.00							
	Total	**5412.00**							
16	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383:2016:, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, primer, sealant, curing of concrete slabs for 14-days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work.[PWD SR 2023-24/ Volume-3/ Chapter-16/P.NO-149/ Item no:-16.28]								
	Kunte Road[CC Road]	Cum	1.00	120.00	4.50	0.12	64.80		
	Kunte Road A Cross Thindlu	Cum	1.00	30.00	4.00	0.12	14.40		
					Total		**79.20**	**7429.40**	**588408.48**
	Basic Rate	**6754.00**							
	Add AW 10%	675.40							
	Total	**7429.40**							
17	**Wet Mix Macadam** (Plant mix method) Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density[PWD SR 2023-24/ Volume-3/ Chapter-4/P.NO-26/ Item no:-4.17]								
		Edge Cutting/Potholes/Road Damage							
	ii] Sampige Road	Cum	1.00	805.00	6.00	0.15	724.50		
	iii] Thindlu Village					0.15			
	Akayamma House Road	Cum	1.00	61.00	5.50	0.15	50.33		
	3rd Cross[Opp Akayamma House Road]	Cum	1.00	156.00	5.00	0.15	117.00		
	iv] Indian Express Layout					0.15			
	1st Main Left Side	Cum	1.00	94.00	4.50	0.15	63.45		
	1st Main Right Side	Cum	1.00	138.00	5.40	0.15	111.78		
	1st Main 1st cross	Cum	1.00	33.00	3.50	0.15	17.33		
	1st Main 2nd cross	Cum	1.00	31.00	4.00	0.15	18.60		
	1st Main 3rd cross	Cum	1.00	31.00	4.50	0.15	20.93		
	7th Cross[Prakruthi Home]	Cum	1.00	100.00	4.50	0.15	67.50		
	2nd Main Left Side	Cum	1.00	87.00	5.50	0.15	71.78		
	2nd Main Right Side	Cum	1.00	43.00	5.00	0.15	32.25		
	v]Dhanalakshmi Layout					0.15			
	2nd Cross	Cum	1.00	156.00	5.00	0.15	117.00		
	3rd Cross	Cum	1.00	165.00	4.50	0.15	111.38		
					Sub-Total		1523.81		
	Consider 15% Road Damage					**A**	**228.57**		
	Cauveri Enclave[New Asphalt Road]	Cum	1.00	152.00	4.80	0.15	109.44		

					Sub-Total B		109.44		
					Total A+B		338.01	2814.90	951466.46
	Basic Rate	**2559.00**							
	Add AW 10%	255.90							
	Total	**2814.90**							
18	Providing and applying **primer coat** with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. Prime Coat over WMM/WBM[PWD SR 2023-24/ Volume-3/ Chapter-5/P.NO-29/ Item no:-5.1 A [i]]								
		Edge Cutting/Potholes/Road Damage							
	ii] Sampige Road	Sqm	1.00	805.00	6.00		4830.00		
	iii] Thindlu Village								
	Akayamma House Road	Sqm	1.00	61.00	5.50		335.50		
	3rd Cross[Opp Akayamma House Road]	Sqm	1.00	156.00	5.00		780.00		
	iv] Indian Express Layout								
	1st Main Left Side	Sqm	1.00	94.00	4.50		423.00		
	1st Main Right Side	Sqm	1.00	138.00	5.40		745.20		
	1st Main 1st cross	Sqm	1.00	33.00	3.50		115.50		
	1st Main 2nd cross	Sqm	1.00	31.00	4.00		124.00		
	1st Main 3rd cross	Sqm	1.00	31.00	4.50		139.50		
	7th Cross[Prakruthi Home]	Sqm	1.00	100.00	4.50		450.00		
	2nd Main Left Side	Sqm	1.00	87.00	5.50		478.50		
	2nd Main Right Side	Sqm	1.00	43.00	5.00		215.00		
	v]Dhanalakshmi Layout								
	2nd Cross	Sqm	1.00	156.00	5.00		780.00		
	3rd Cross	Sqm	1.00	165.00	4.50		742.50		
		Sqm			**Sub-Total**		10158.70		
	Consider 15% Road Damage	Sqm			**Sub-Total A**		**1523.81**		
		Profile Correction							
	ii] Sampige Road	Sqm	1.00	805.00	6.00		4830.00		
	iii] Thindlu Village	Sqm							
	Akayamma House Road	Sqm	1.00	61.00	5.50		335.50		
	3rd Cross[Opp Akayamma House Road]	Sqm	1.00	156.00	5.00		780.00		
	iv] Indian Express Layout								
	1st Main Left Side	Sqm	1.00	94.00	4.50		423.00		
	1st Main Right Side	Sqm	1.00	138.00	5.40		745.20		
	1st Main 1st cross	Sqm	1.00	33.00	3.50		115.50		
	1st Main 2nd cross	Sqm	1.00	31.00	4.00		124.00		
	1st Main 3rd cross	Sqm	1.00	31.00	4.50		139.50		
	7th Cross[Prakruthi Home]	Sqm	1.00	100.00	4.50		450.00		
	2nd Main Left Side	Sqm	1.00	87.00	5.50		478.50		
	2nd Main Right Side	Sqm	1.00	43.00	5.00		215.00		
	v]Dhanalakshmi Layout	Sqm							
	2nd Cross	Sqm	1.00	156.00	5.00		780.00		
	3rd Cross	Sqm	1.00	165.00	4.50		742.50		
					Sub-Total		10158.70		
	Consider 15% for Profile Correction				**Sub-Total B**		**1523.81**		
	Cauveri Enclave[New Asphalt Road]	Sqm	1.00	152.00	4.80		729.60		
					Sub-Total C		**729.60**		
					Total A+B+C		**3777.21**	**45.10**	**170352.17**
	Basic Rate	**41.00**							
	Add AW 10%	4.10							
	Total	**45.10**							
19	Tack coat on Bituminous surface,Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom[PWD SR 2023-24/ Volume-3/ Chapter-5/P.NO-31/ Item no:-5.3 i]								

	Cauveri Enclave[New Asphalt Road]	Sqm	1.00	152.00	4.80		729.60		
	ii] Sampige Road	Sqm	1.00	805.00	6.00		4830.00		
	iii] Thindlu Village								
	Akayamma House Road	Sqm	1.00	61.00	5.50		335.50		
	3rd Cross[Opp Akayamma House Road]	Sqm	1.00	156.00	5.00		780.00		
	iv] Indian Express Layout								
	1st Main Left Side	Sqm	1.00	94.00	4.50		423.00		
	1st Main Right Side	Sqm	1.00	138.00	5.40		745.20		
	1st Main 1st cross	Sqm	1.00	33.00	3.50		115.50		
	1st Main 2nd cross	Sqm	1.00	31.00	4.00		124.00		
	1st Main 3rd cross	Sqm	1.00	31.00	4.50		139.50		
	7th Cross[Prakruthi Home]	Sqm	1.00	100.00	4.50		450.00		
	2nd Main Left Side	Sqm	1.00	87.00	5.50		478.50		
	2nd Main Right Side	Sqm	1.00	43.00	5.00		215.00		
	v]Dhanalakshmi Layout								
	2nd Cross	Sqm	1.00	156.00	5.00		780.00		
	3rd Cross	Sqm	1.00	165.00	4.50		742.50		
					Total		**10888.30**	**13.20**	**143725.56**
	Basic Rate	**12.00**							
	Add AW 10%	1.20							
	Total	**13.20**							
20	Dense Graded Bituminous Macadam Grading - II for traffic <20 MSA,Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects[PWD SR 2023-24/ Volume-3/ Chapter-5/P.NO-35/ Item no:-5.12 C MoRTH Sec 505]								
		Edge Cutting/Potholes/Road Damage							
	ii] Sampige Road	Cum	1.00	805.00	6.00	0.05	241.50		
	iii] Thindlu Village								
	Akayamma House Road	Cum	1.00	61.00	5.50	0.05	16.78		
	3rd Cross[Opp Akayamma House Road]	Cum	1.00	156.00	5.00	0.05	39.00		
	iv] Indian Express Layout								
	1st Main Left Side	Cum	1.00	94.00	4.50	0.05	21.15		
	1st Main Right Side	Cum	1.00	138.00	5.40	0.05	37.26		
	1st Main 1st cross	Cum	1.00	33.00	3.50	0.05	5.78		
	1st Main 2nd cross	Cum	1.00	31.00	4.00	0.05	6.20		
	1st Main 3rd cross	Cum	1.00	31.00	4.50	0.05	6.98		
	7th Cross[Prakruthi Home]	Cum	1.00	100.00	4.50	0.05	22.50		
	2nd Main Left Side	Cum	1.00	87.00	5.50	0.05	23.93		
	2nd Main Right Side	Cum	1.00	43.00	5.00	0.05	10.75		
	v]Dhanalakshmi Layout								
	2nd Cross	Cum	1.00	156.00	5.00	0.05	39.00		
	3rd Cross	Cum	1.00	165.00	4.50	0.05	37.13		
		Cum			**Sub-Total**		507.94		
	Consider 15% Road Damage	Cum			**Sub-Total A**		**76.19**		
		Profile Correction							
	ii] Sampige Road	Cum	1.00	805.00	6.00	0.05	241.50		
	iii] Thindlu Village								
	Akayamma House Road	Cum	1.00	61.00	5.50	0.05	16.78		
	3rd Cross[Opp Akayamma House Road]	Cum	1.00	156.00	5.00	0.05	39.00		
	iv] Indian Express Layout								
	1st Main Left Side	Cum	1.00	94.00	4.50	0.05	21.15		
	1st Main Right Side	Cum	1.00	138.00	5.40	0.05	37.26		
	1st Main 1st cross	Cum	1.00	33.00	3.50	0.05	5.78		
	1st Main 2nd cross	Cum	1.00	31.00	4.00	0.05	6.20		
	1st Main 3rd cross	Cum	1.00	31.00	4.50	0.05	6.98		

	7th Cross[Prakruthi Home]	Cum	1.00	100.00	4.50	0.05	22.50		
	2nd Main Left Side	Cum	1.00	87.00	5.50	0.05	23.93		
	2nd Main Right Side	Cum	1.00	43.00	5.00	0.05	10.75		
	v]Dhanalakshmi Layout								
	2nd Cross	Cum	1.00	156.00	5.00	0.05	39.00		
	3rd Cross	Cum	1.00	165.00	4.50	0.05	37.13		
					Sub-Total		507.94		
	Consider 15% for Profile Correction				**Sub-Total B**		**76.19**		
	Cauveri Enclave[New Asphalt Road]	Cum	1.00	152.00	4.80	0.05	36.48		
					Sub-Total C		**36.48**		
					Total A+B+C		**188.86**	**10393.90**	**1962997.15**
	Basic Rate	**9449.00**							
	Add AW 10%	944.90							
	Total	**10393.90**							
21	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site,laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects[PWD SR 2023-24/ Volume-3/ Chapter-5/P.NO-36/ Item no:-5.16 C MoRTH Sec 507]								
	Cauveri Enclave[New Asphalt Road]	Cum	1.00	152.00	4.80	0.04	29.18		
	ii] Sampige Road	Cum	1.00	805.00	6.00	0.04	193.20		
	iii] Thindlu Village								
	Akayamma House Road	Cum	1.00	62.00	5.50	0.04	13.64		
	3rd Cross[Opp Akayamma House Road]	Cum	1.00	156.00	5.00	0.04	31.20		
	iv] Indian Express Layout								
	1st Main Left Side	Cum	1.00	94.00	4.50	0.04	16.92		
	1st Main Right Side	Cum	1.00	138.00	5.40	0.04	29.81		
	1st Main 1st cross	Cum	1.00	33.00	3.50	0.04	4.62		
	1st Main 2nd cross	Cum	1.00	31.00	4.00	0.04	4.96		
	1st Main 3rd cross	Cum	1.00	30.00	4.50	0.04	5.40		
	7th Cross[Prakruthi Home]	Cum	1.00	100.00	4.50	0.04	18.00		
	2nd Main Left Side	Cum	1.00	90.00	5.50	0.04	19.80		
	2nd Main Right Side	Cum	1.00	45.00	5.00	0.04	9.00		
	v]Dhanalakshmi Layout								
	2nd Cross	Cum	1.00	156.00	5.00	0.04	31.20		
	3rd Cross	Cum	1.00	165.00	4.50	0.04	29.70		
					Sub-Total		**436.63**	**12049.40**	**5261153.62**
	Basic Rate	**10954.00**							
	Add AW 10%	1095.40							
	Total	**12049.40**							
22	Road Marking with Hot Applied Thermoplastic Compound with Re flectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.[PWD SR 2023-24/ Volume-3/ Chapter-8/P.NO-67/ Item no:-8.15 MoRTH Sec803]								
	Cauveri Enclave[New Asphalt Road]	Sqm	2.00	152.00	0.10		30.40		
	ii] Sampige Road	Sqm	2.50	805.00	0.10		201.25		
	iii] Thindlu Village								
	Akayamma House Road	Sqm	2.00	61.00	0.10		12.20		
	3rd Cross[Opp Akayamma House Road]	Sqm	2.00	156.00	0.10		31.20		
	iv] Indian Express Layout								
	1st Main Left Side	Sqm	2.00	94.00	0.10		18.80		
	1st Main Right Side	Sqm	2.00	138.00	0.10		27.60		
	1st Main 1st cross	Sqm	2.00	33.00	0.10		6.60		

	1st Main 2nd cross	Sqm	2.00	31.00	0.10		6.20		
	1st Main 3rd cross	Sqm	2.00	31.00	0.10		6.20		
	7th Cross[Prakruthi Home]	Sqm	2.00	100.00	0.10		20.00		
	2nd Main Left Side	Sqm	2.00	87.00	0.10		17.40		
	2nd Main Right Side	Sqm	2.00	43.00	0.10		8.60		
	v]Dhanalakshmi Layout								
	2nd Cross	Sqm	2.00	156.00	0.10		31.20		
	3rd Cross	Sqm	2.00	165.00	0.10		33.00		
					Sub-Total		**450.65**	**583.00**	**262728.95**
	Basic Rate	**530.00**							
	Add AW 10%	53.00							
	Total	**583.00**							
23	Unload ing, Loading & Carriage of MaterialsLoading and Unloading of Stone Boulder/Stone aggregates/Sand/Kankar/Moorum. (Tipper 55 m3)[PWD SR 2023-24/ Volume-3/ Chapter-1/P.NO-5/ Item no:-1.1 a]								
	Quantity From Item 3	Cum	1.00	1326.42			1326.42		
	Quantity From Item 12	Cum	1.00	558.68			558.68		
					Total		**1885.10**	**148.50**	**279937.50**
	Basic Rate	**135.00**							
	Add AW 10%	13.50							
	Total	**148.50**							
24	Cost of Haulage Excluding Loading and Unloading,Taking output 10 t load and lead 10 km = 100 t.km[PWD SR 2023-24/ Volume-3/ Chapter-1/P.NO-3/ Item no:-1.4 iii A]								
	Quantity from Item No-1	t.km	1.00	1885.10	1.28		2412.93		
						Total	**2412.93**	**198.00**	**477760.00**
	Basic Rate	**12.00**							
	15KM LEAD [12*15=180]	180.00							
	Add AW 10%	18.00							
	Total	**198.00**							
							Total		16806069.41
							GST 18%		3025092.49
							PMC Charges 1%		168060.69
							Miscelleneous		777.40
							Grand Total		**20000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2022-23, and Data Rates.

Assistant Engineer
Ward 10, Kodigehalli Sub-Division
BBMP

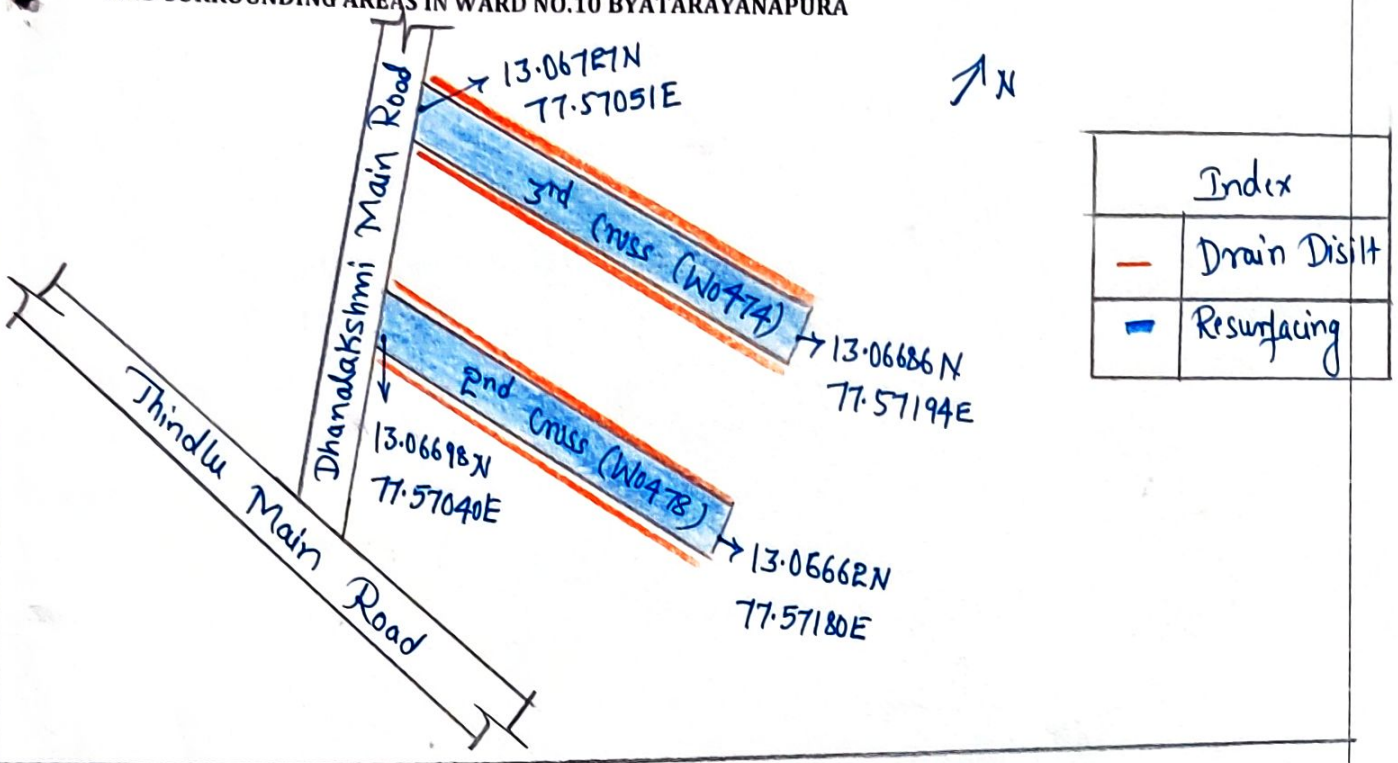
Asst. Executive Engineer
Kodigehalli Sub-Division
BBMP

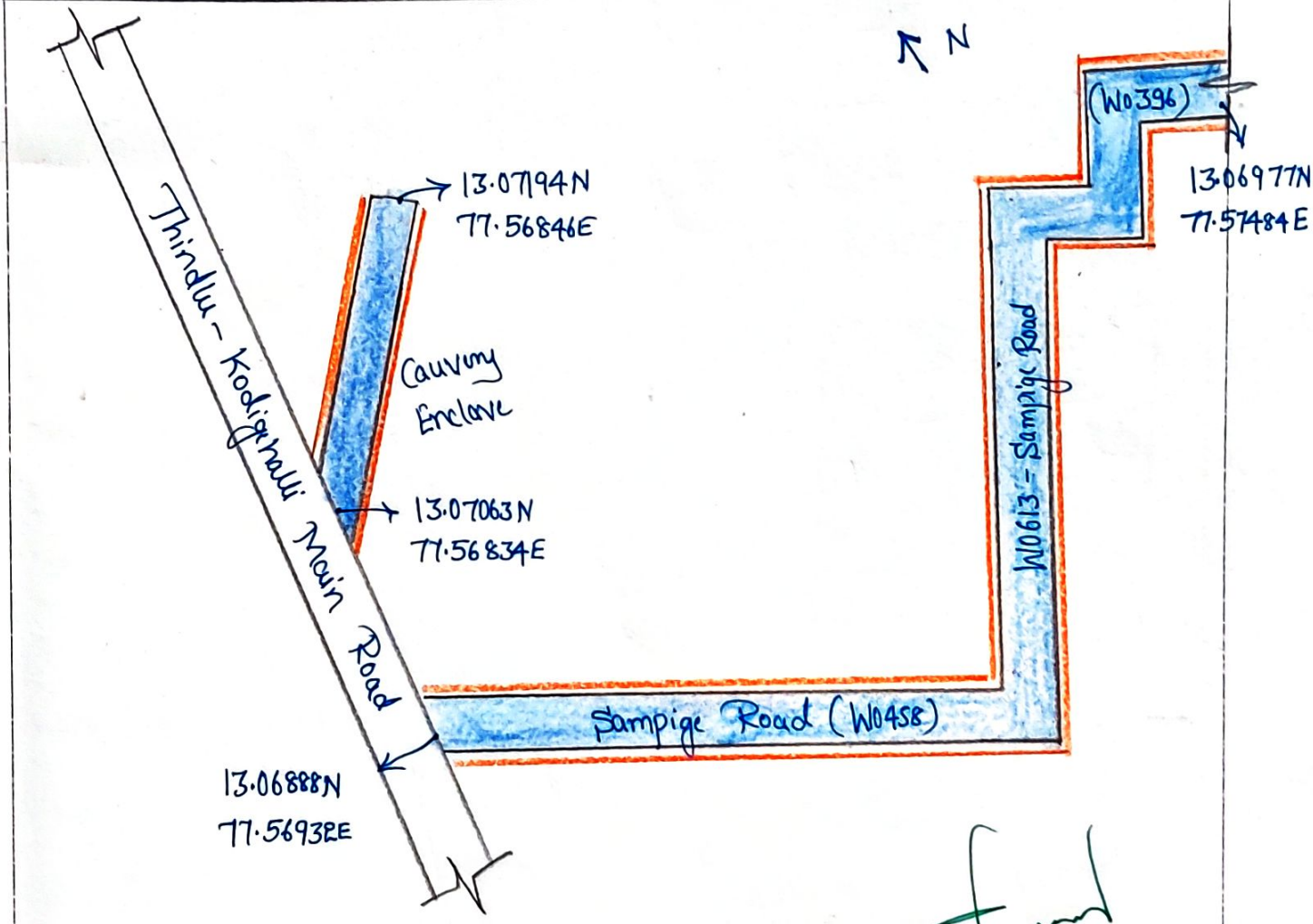
Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Executive Engineer
Byatarayanapura Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA

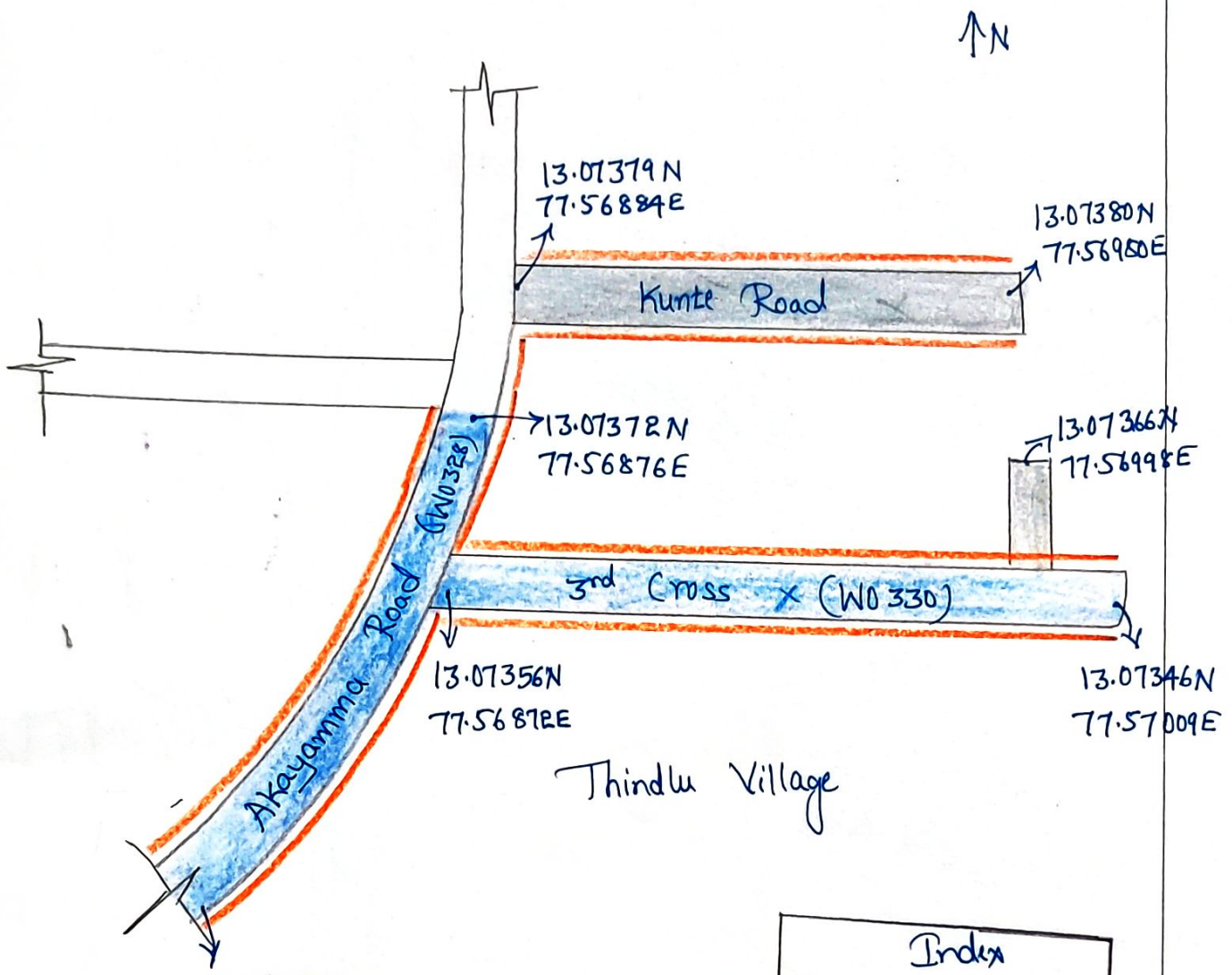




AE-1

Assistant Executive Engineer
Kodigehalli Sub Divisio...
BBMP, Bangalore

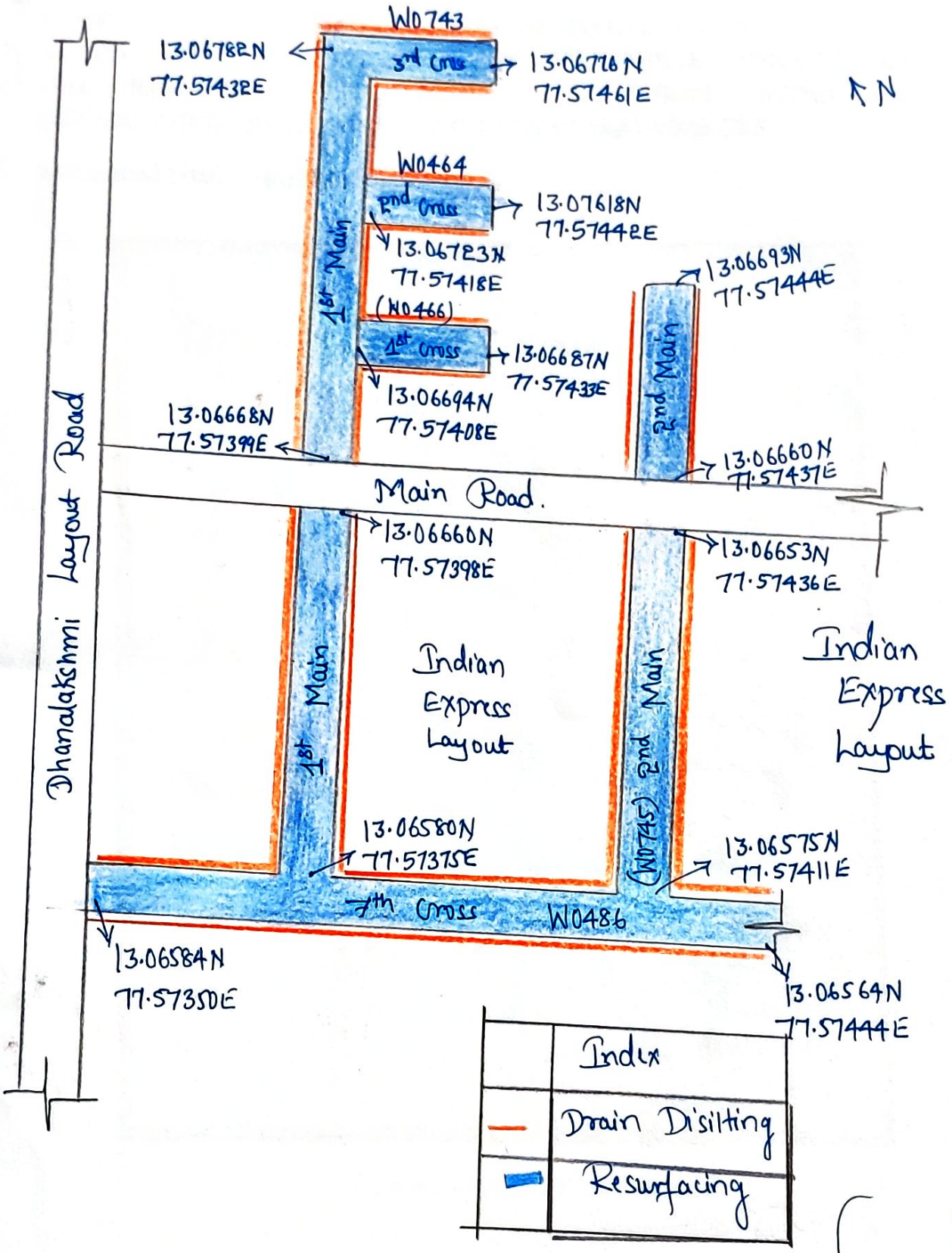
NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA



Index	
—	Drain Disilting
—	Resurfacing
—	CC Road

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA



Sadeeya AP
AE-1

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalory

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA

Estimated Cost :- 200.00lakhs

Figure 1 CAUVERY ENCLAVE

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA

Estimated Cost :- 200.00lakhs

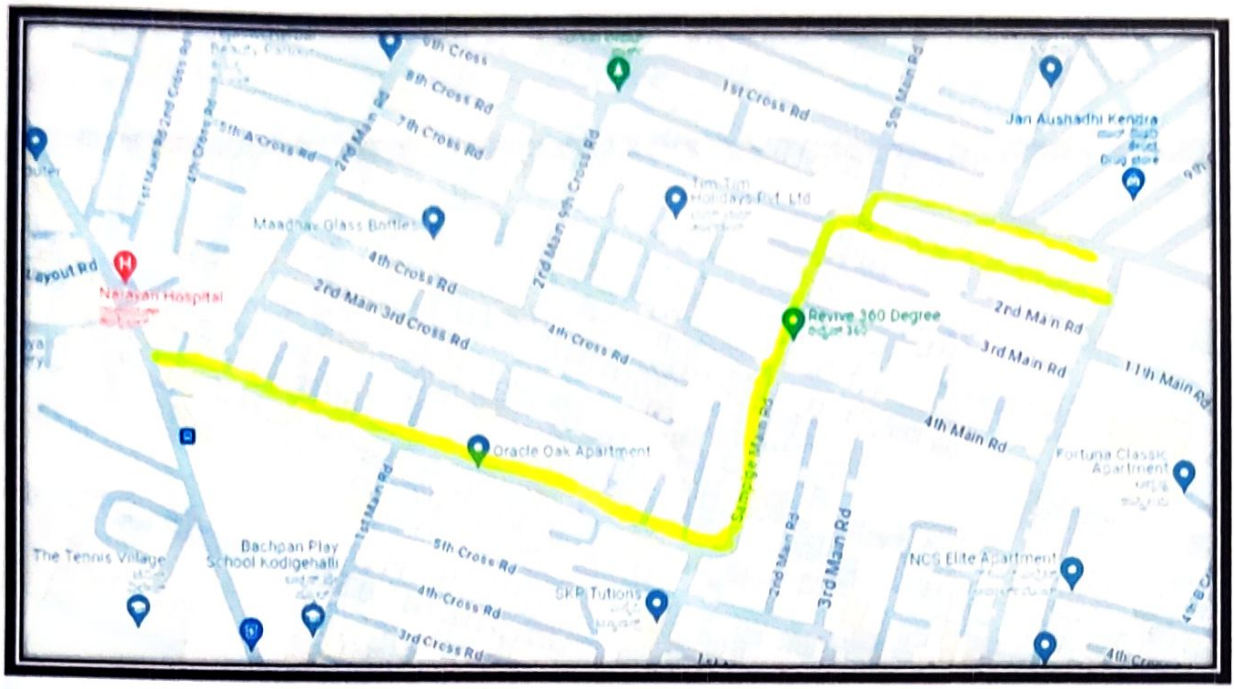


Figure 2 SAMPIGE ROAD

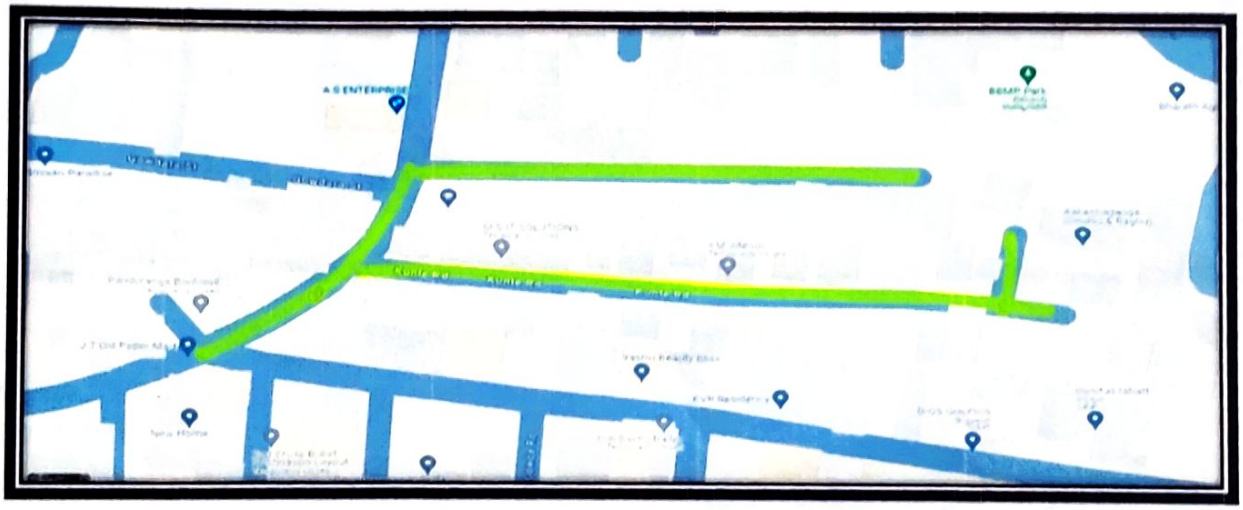


Figure 3 THINDLU VILLAGE

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA

Estimated Cost :- 200.00lakhs

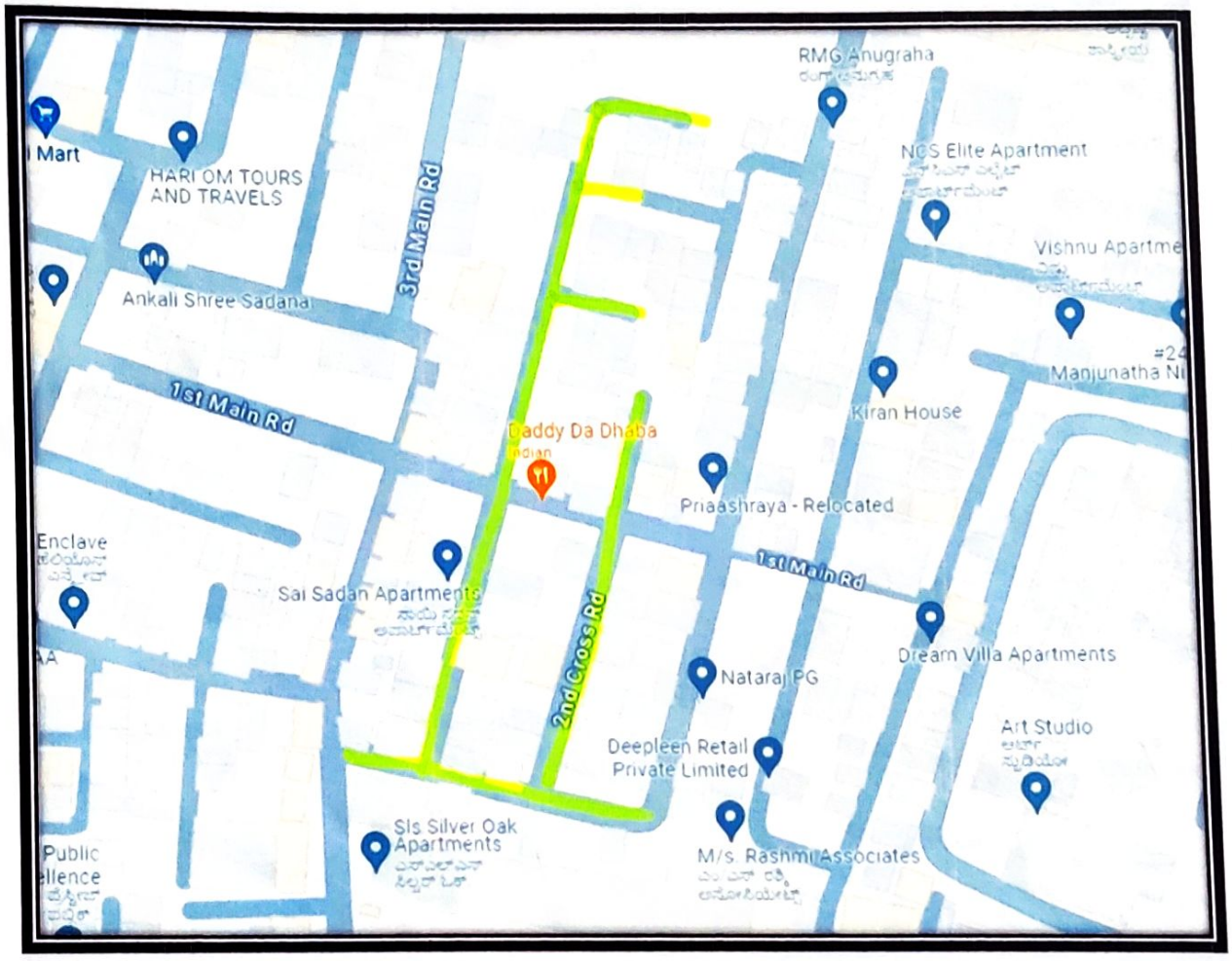


Figure 4 INDIAN EXPRESS LAYOUT

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

NAME OF WORK: - IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA

Estimated Cost :- 200.00lakhs

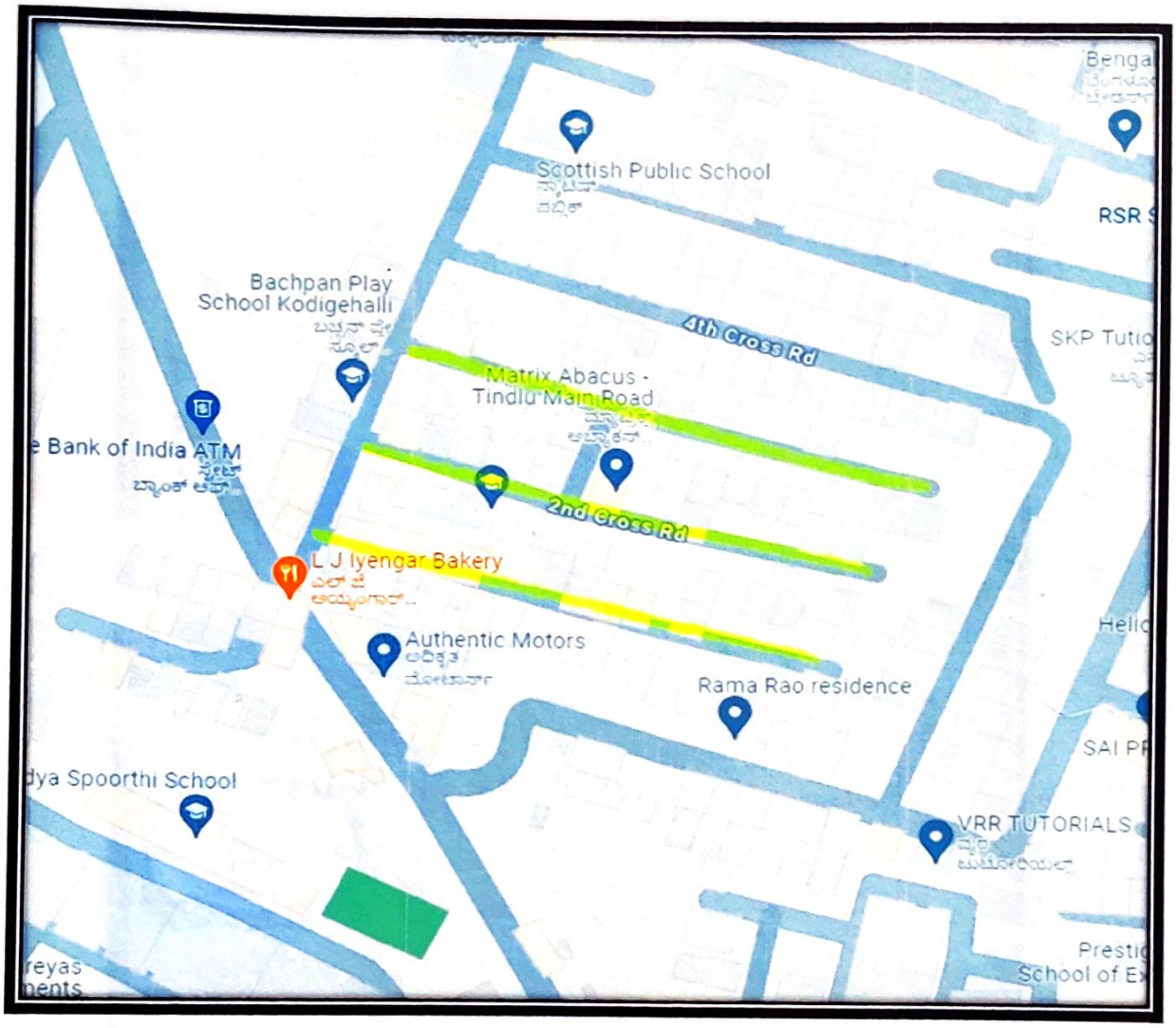


Figure 5 DHANALAKSHMI LAYOUT

Assistant Executive Engineer
Kadigehalli Sub Division
BBMP, Bangalore

SL NO	NAME OF WORK	ROAD NAME	ROAD ID	ROAD		STARTING POINT		ENDING POINT	
				LENGTH	WIDTH	LATTITUDE	LONGITUDE	LATTITUDE	LONGITUDE
1	IMPROVEMENTS OF ROADS,DRAINS AND OTHER ALLIED WORKS AT CAUVERY ENCLAVE,SAMPIGE ROAD,THINDLU VILLAGE,INDIAN EXPRESS LAYOUT,DHANALAKSHMI LAYOUT AND SURROUNDING AREAS IN WARD NO.10 BYATARAYANAPURA	i] Cauveri Enclave		152.00	4.80	13.07063N	77.56834E	13.0794N	77.56846E
		ii] Sampige Road	W0458, W0613, W0396	805.00	6.00	13.0688N	77.56932E	13.06977N	77.57484E
		iii] Thindlu Village							
		Akayamma House Road	W0328	61.00	5.50	13.07340N	77.56847E	13.07372N	77.56876E
		3rd Cross[Opp Akayamma House Road]	W0330	156.00	5.00	13.07356N	77.56872E	13.07346N	77.57009E
		Kunte Road		120.00	4.50	13.07379N	77.56884E	13.07380N	77.56950E
		Kunte Road A Cross		30.00	4.00	13.07346N	77.57009E	13.07366N	77.56998E
		iv] Indian Express Layout							
		1st Main Left Side		94.00	4.50	13.06660N	77.57398E	13.0580N	77.57375E
		1st Main Right Side		138.00	5.40	13.06668N	77.57399E	13.06782N	77.57432E
		1st Main 1st cross	W0466	33.00	3.50	13.06694N	77.57408E	13.06678N	77.57433E
		1st Main 2nd cross	W0464	31.00	4.00	13.06723N	77.56418E	13.07618N	77.57442E
		1st Main 3rd cross	W0743	31.00	4.50	13.06782N	77.57432E	13.06776N	77.57461E
		7th Cross[Prakruthi Home]	W0486	100.00	4.50	13.06584N	77.57350E	13.06564N	77.57444E
		2nd Main Left Side	W0745	87.00	5.50	13.06653N	77.57436E	13.06575N	77.57411E
		2nd Main Right Side		43.00	5.00	13.06660N	77.57437E	13.6693N	77.57444E
		v]Dhanalakshmi Layout							
		2nd Cross	W0478	156.00	5.00	13.06698N	77.57040E	13.06662N	77.57180E
		3rd Cross	W0474	165.00	4.50	13.06727N	77.57051E	13.06686N	77.57194E

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore